



# Title of the publication

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Keyword1 | Keyword2 | Keyword3

Abbreviations: SAM, self-assembled monolayer; OTS, octadecyltrichlorosilane

#### Introduction

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$$\frac{D\theta}{Dt} = \frac{\partial\theta}{\partial t} + u \cdot \nabla\theta = 0$$
 [1

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# Results

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## Simulations.

### Simulation 1

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#### Simulation 2

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#### Discussion

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## Materials and Methods

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- M. Belkin and P. Niyogi, Using manifold structure for partially labelled classification, Advances in NIPS, 15 (2003).
- P. Bérard, G. Besson, and S. Gallot, Embedding Riemannian manifolds by their heat kernel, Geom. and Fun. Anal., 4 (1994), pp. 374–398.
- R.R. Coifman and S. Lafon, Diffusion maps, Appl. Comp. Harm. Anal., 21 (2006), pp. 5-30.
- R.R. Coifman, S. Lafon, A. Lee, M. Maggioni, B. Nadler, F. Warner, and S. Zucker, Geometric diffusions as a tool for harmonic analysis and structure definition of data. Part I: Diffusion maps, Proc. of Nat. Acad. Sci., (2005), pp. 7426–7431.
- P. Das, M. Moll, H. Stamati, L. Kavraki, and C. Clementi, Low-dimensional, freeenergy landscapes of protein-folding reactions by nonlinear dimensionality reduction, P.N.A.S., 103 (2006), pp. 9885–9890.
- D. Donoho and C. Grimes, Hessian eigenmaps: new locally linear embedding techniques for high-dimensional data, Proceedings of the National Academy of Sciences, 100 (2003), pp. 5591–5596.
- D. L. Donoho and C. Grimes, When does isomap recover natural parameterization of families of articulated images?, Tech. Report Tech. Rep. 2002-27, Department of Statistics, Stanford University, August 2002.
- M. Grüter and K.-O. Widman, The Green function for uniformly elliptic equations, Man. Math., 37 (1982), pp. 303–342.

**Definition 1.** A bounded function  $\theta$  is a weak solution of QG if for any  $\phi \in C_0^{\infty}(\mathbb{R}/_{\mathbb{Z}} \times \mathbb{R} \times [0, \varepsilon])$  we have

$$\begin{split} &\int_{\mathbb{R}^{+}\times\mathbb{R}/\mathbb{Z}\times\mathbb{R}}\theta(x,y,t)\,\partial_{t}\phi\left(x,y,t\right)dydxdt + \\ &+ &\int_{\mathbb{R}^{+}\times\mathbb{R}/\mathbb{Z}\times\mathbb{R}}\theta\left(x,y,t\right)u(x,y,t)\cdot\nabla\phi\left(x,y,t\right)dydxdt = 0 \quad \textbf{[2]} \end{split}$$

where u is determined previously.

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**Theorem 1.** If the active scalar  $\theta$  satisfies the equation [2], then  $\varphi$  satisfies the equation

$$\frac{\partial \varphi}{\partial t}(x,t) = \int_{\mathbb{R}/\mathbb{Z}} \frac{\frac{\partial \varphi}{\partial x}(x,t) - \frac{\partial \varphi}{\partial u}(u,t)}{\left[(x-u)^2 + (\varphi(x,t) - \varphi(u,t))^2\right]^{\frac{1}{2}}} \\
\chi(x-u,\varphi(x,t) - \varphi(u,t))du + \\
+ \int_{\mathbb{R}/\mathbb{Z}} \left[\frac{\partial \varphi}{\partial x}(x,t) - \frac{\partial \varphi}{\partial u}(u,t)\right] \\
\eta(x-u,\varphi(x,t) - \varphi(u,t))du + Error \quad [3]$$

with  $|Error| \leq C \, \delta |log\delta|$  where C depends only on  $\|\theta\|_{L^{\infty}}$  and  $\|\nabla \varphi\|_{L^{\infty}}$ .

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## **Appendix**

An appendix without a title.

# Appendix: Appendix title

An appendix with a title.

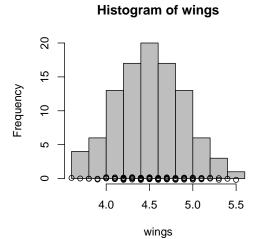
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- R. Hempel, L. Seco, and B. Simon, The essential spectrum of neumann laplacians on some bounded singular domains, 1991.
- Kadison, R. V. and Singer, I. M. (1959) Extensions of pure states, Amer. J. Math. 81, 383-400.
- 11. Anderson, J. (1981) A conjecture concerning the pure states of B(H) and a related theorem. in Topics in Modern Operator Theory, Birkhaüser, pp. 27-43.
- 12. Anderson, J. (1979) Extreme points in sets of positive linear maps on  ${\cal B}(H)$ . J. Funct. Anal. 31, 195-217.
- 13. Anderson, J. (1979) Pathology in the Calkin algebra. J. Operator Theory 2, 159-167.
- Johnson, B. E. and Parrott, S. K. (1972) Operators commuting with a von Neumann algebra modulo the set of compact operators. J. Funct. Anal. 11, 39-61.
- 15. Akemann, C. and Weaver, N. (2004) Consistency of a counterexample to Naimark's problem. Proc. Nat. Acad. Sci. USA 101, 7522-7525.
- J. Tenenbaum, V. de Silva, and J. Langford, A global geometric framework for nonlinear dimensionality reduction, Science, 290 (2000), pp. 2319–2323.
- Z. Zhang and H. Zha, Principal manifolds and nonlinear dimension reduction via local tangent space alignement, Tech. Report CSE-02-019, Department of computer science and engineering, Pennsylvania State University, 2002.









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Fig. 1. Figure caption

Table 1. Table caption

0.2

Treatments	Response 1	Response 2
Treatment 1	0.0003262	0.562
Treatment 2	0.0015681	0.910
Treatment 3	0.0009271	0.296

